

Response
Application No. 10/813,116
Attorney Docket No. 042164

REMARKS

Claims 4-13 are pending in the application. It is respectfully submitted that this Response is fully responsive to the Office Action dated June 11, 2007.

As to the Merits

As to the merits of this case, the Examiner relies on the newly cited reference of Amano et al. (U.S. Patent 5,451,767) in setting for the following rejections:

claims 4, 6, 7, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by **Nagata** (US Patent No. 3,659,159);

claims 5, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Moise et al.** (US Patent No. 6,008,917);

claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Cornely et al.** (US Patent No. 3,319,080);

claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Amano et al.**;

claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Moise et al.** and further in view of **Cornely et al.**; and

claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Moise et al.** and further in view of **Amano et al.**.

Each of these rejections is respectfully traversed.

Response
Application No. 10/813,116
Attorney Docket No. 042164

In the last response filed March 26, 2007, Applicants argued that **Nagata** failed to disclose the features of claim 4 concerning *at least one photodiode for converting an optical signal to an electrical signal; and a resistor having its one end connected to an anode of this photodiode*, since the optoelectronic amplifier circuit, as shown in Fig. 4, of **Nagata** does not include at least one photodiode for converting an optical signal to an electrical signal, since instead the optoelectronic amplifier of Fig. 4 includes either a photo-transistor or solar battery, but not a photodiode, as the photoelectric conversion element 42.

In response, the Examiner asserts that **Nagata** clearly states in col. 3, lines 67-70 that the circuit of Fig. 4 operates in the same way as that of the circuit of Fig. 3 and that the operation of the photoelectric conversion element 42 is equivalent to that of the photodiode, since both elements perform converting light into electric current. In addition, the Examiner argues that it is inherent that the conversion element 42 can be replaced with the photodiode of Fig. 3 (col. 2, line 62). See, item 13, page 9 of the Action.

However, it is respectfully submitted that the Examiner is misapplying the inherency doctrine under 35 U.S.C. §102. That is, under 35 U.S.C. §102, an element of a claim is inherent if the reference discloses that such element is necessarily disclosed in the reference. In other words, the Examiner's statement that it is inherent that the photoelectric conversion element 42 can be replaced with the photodiode of Fig. 3 falls under the realm of obviousness under 35

Response
Application No. 10/813,116
Attorney Docket No. 042164

U.S.C. §103 and fails to be a factor involving inherency under 35 U.S.C. §102. In other words, the Examiner's rejection of claim 4 under 35 U.S.C. §102 is improper.

Moreover, even if, assuming *arguendo*, that the photo-electric conversion element 42 can be replaced with the photodiode 35 of Fig. 3, it is respectfully submitted that such modification of the circuit of Fig. 4 would still not disclose or fairly suggest the features of claim 4 regarding a *resistor having its one end connected to an anode of the photodiode*.

That is, in Fig. 3, the anode of the photodiode 35 is connected to ground. Therefore, if the photodiode 35 were to replace the photoelectric conversion element 42 in Fig. 4, the anode of the photodiode 35 would be connected to ground and the cathode of the photodiode 35 would be connected to one end of the resistor 49 when the switch 48 is closed.

Therefore, even if, the circuit of Fig. 4 of **Nagata** is modified by replacing the photoelectric conversion element 42 with the photodiode 35 of Fig. 3, such modification would still fail to disclose the feature of claim 4 regarding *a resistor having its one end connected to an anode of this photodiode*.

With regard to independent claim 7, Applicants believe that such arguments made above with regard to claim 4 are also applicable to independent claim 7.

Response
Application No. 10/813,116
Attorney Docket No. 042164

In view of the above remarks, Applicants believe that this application is in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Thomas E. Brown
Attorney for Applicants
Registration No. 44,450
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

TEB/nrp